

8017-357.JMD.#262085

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: )  
Kevin C. SOUTH, et al. ) Before the Examiner  
Serial No. 10/084,039 ) Charles E. Cooley  
Filed February 27, 2002 ) Group Art Unit 1723  
INTERNAL SEAL FOR A ) February 26, 2004  
DISPOSABLE CENTRIFUGE )

**AFFIDAVIT OF PETER K. HERMAN**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Peter K. Herman, being first duly sworn, do depose and state the following:

1. I am one of the named inventors of U.S. Patent Application Serial No. 10/084,039.
2. I am also one of the named inventors of U.S. Patent Application Serial No. 09/739,070, cited as Publication No. US 2001/0016549 A1, now U.S. Patent No. 6,579,220.
3. The '020 patent discloses a wall-to-wall abutment between a lip of hub (25) and an inner projection of the rotor bottom shell (23). This abutment location is circled in the attached copy of FIG. 2 of the '220 patent.
4. I was jointly responsible for the conception of this wall-to-wall abutment as described in the '220 patent, with my co-inventor, Ismail C. Bagci.
5. The '039 application discloses a wall-to-wall abutment, as illustrated in FIG. 1B that is similar to the wall-to-wall abutment disclosed in the '220 application.
6. I was jointly responsible for the conception of this wall-to-wall abutment, as disclosed in the '039 application, with my co-inventor, Ismail C. Bagci.

7. The wall-to-wall abutment disclosed in the '039 application was derived from the wall-to-wall abutment disclosed in the '220 patent by the same inventive entity, myself and Ismail C. Bagci.

WITNESS my hand this 9<sup>th</sup> day of February, 2004.

Peter K. Herman  
Peter K. Herman

STATE OF TENNESSEE            )  
  ): ss  
COUNTY OF PUTNAM         )

Before me, a Notary Public, in and for said County and State, personally appeared Peter K. Herman, who, being first duly sworn upon his oath, acknowledged the execution of the foregoing "AFFIDAVIT OF PETER K. HERMAN" as his voluntary act and deed.

WITNESS my hand and Notarial Seal this 9<sup>th</sup> day of February, 2004.

Jane Ann Bright  
Notary Public

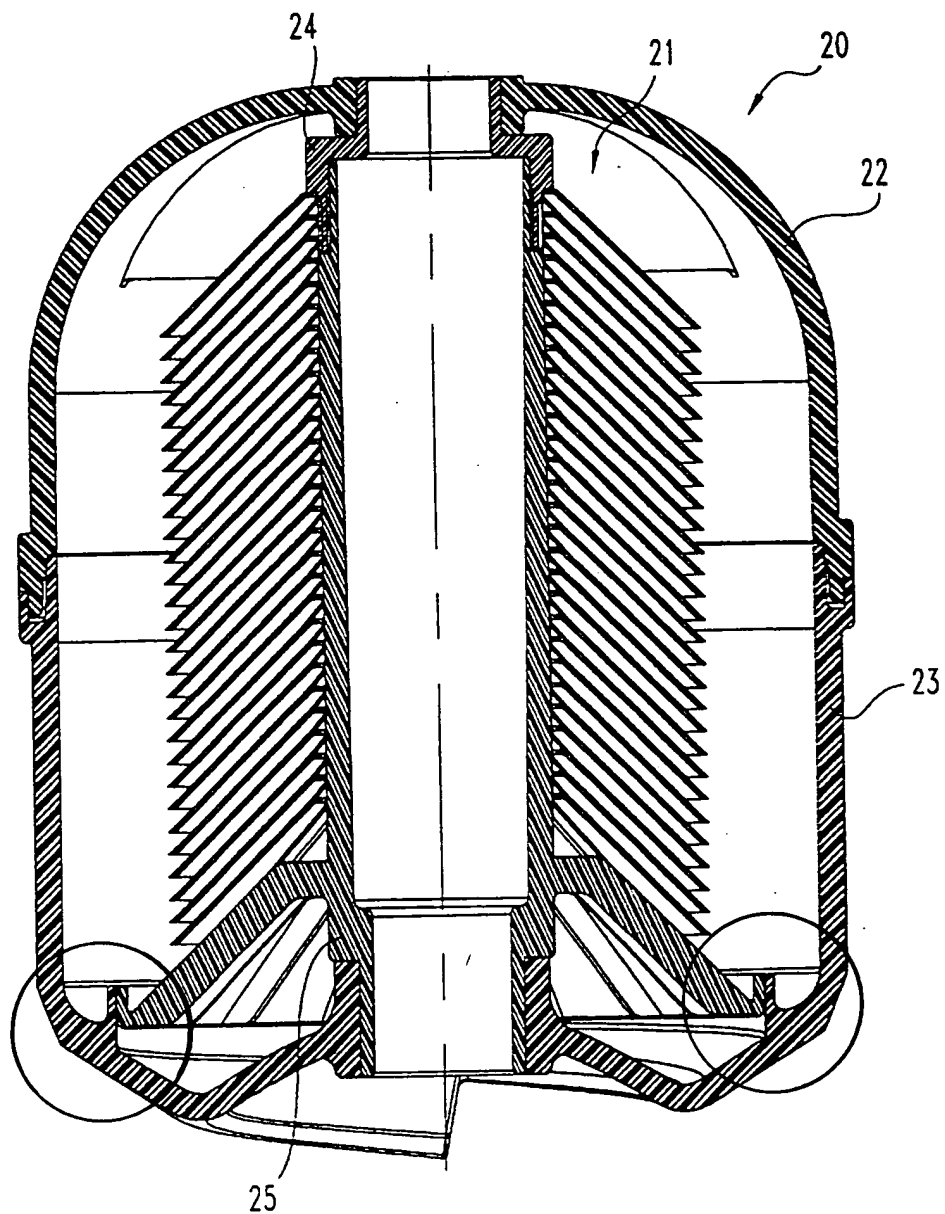
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Resident of Putnam County

My Commission Expires:

3/21/06

Attachment

**Fig. 2**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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DISPOSABLE CENTRIFUGE )

**AFFIDAVIT OF ISMAIL C. BAGCI**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Ismail C. Bagci, being first duly sworn, do depose and state the following:

1. I am one of the named inventors of what is claimed, both as filed and as now amended, in U.S. Patent Application Serial No. 10/084,039. While not named as an inventor at the time of filing of the '039 application, I am jointly responsible for the conception of a structural arrangement that is claimed in the '039 application.

2. I am one of the named inventors of U.S. Patent Application Serial No. 09/739,070, cited as Publication No. US 2001/0016549 A1, now U.S. Patent No. 6,579,220.

3. The '220 patent discloses a wall-to-wall abutment between a lip of hub (25) and an inner projection of the rotor bottom shell (23). This abutment location is circled in the attached copy of FIG. 2 of the '220 patent.

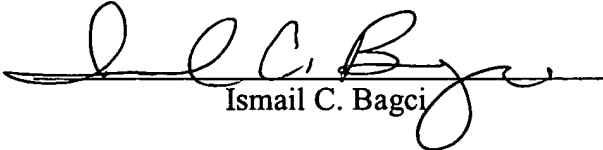
4. I was jointly responsible for the conception of this wall-to-wall abutment as described in the '220 patent, with my co-inventor, Peter K. Herman.

5. The '039 application discloses a wall-to-wall abutment, as illustrated in FIG. 1B that is similar to the wall-to-wall abutment disclosed in the '220 patent.

6. I was jointly responsible for the conception of this wall-to-wall abutment, as disclosed in the '039 application, with my co-inventor, Peter K. Herman.

7. The wall-to-wall abutment disclosed in the '039 application was derived from the wall-to-wall abutment disclosed in the '220 patent by the same inventive entity, myself and Peter K. Herman.

WITNESS my hand this 9 day of February, 2004.

  
Ismail C. Bagci

STATE OF TENNESSEE     )  
                                      ): ss  
COUNTY OF PUTNAM     )

Before me, a Notary Public, in and for said County and State, personally appeared Ismail C. Bagci, who, being first duly sworn upon his oath, acknowledged the execution of the foregoing "AFFIDAVIT OF ISMAIL C. BABCI" as his voluntary act and deed.

WITNESS my hand and Notarial Seal this 9<sup>th</sup> day of February, 2004.

  
Notary Public

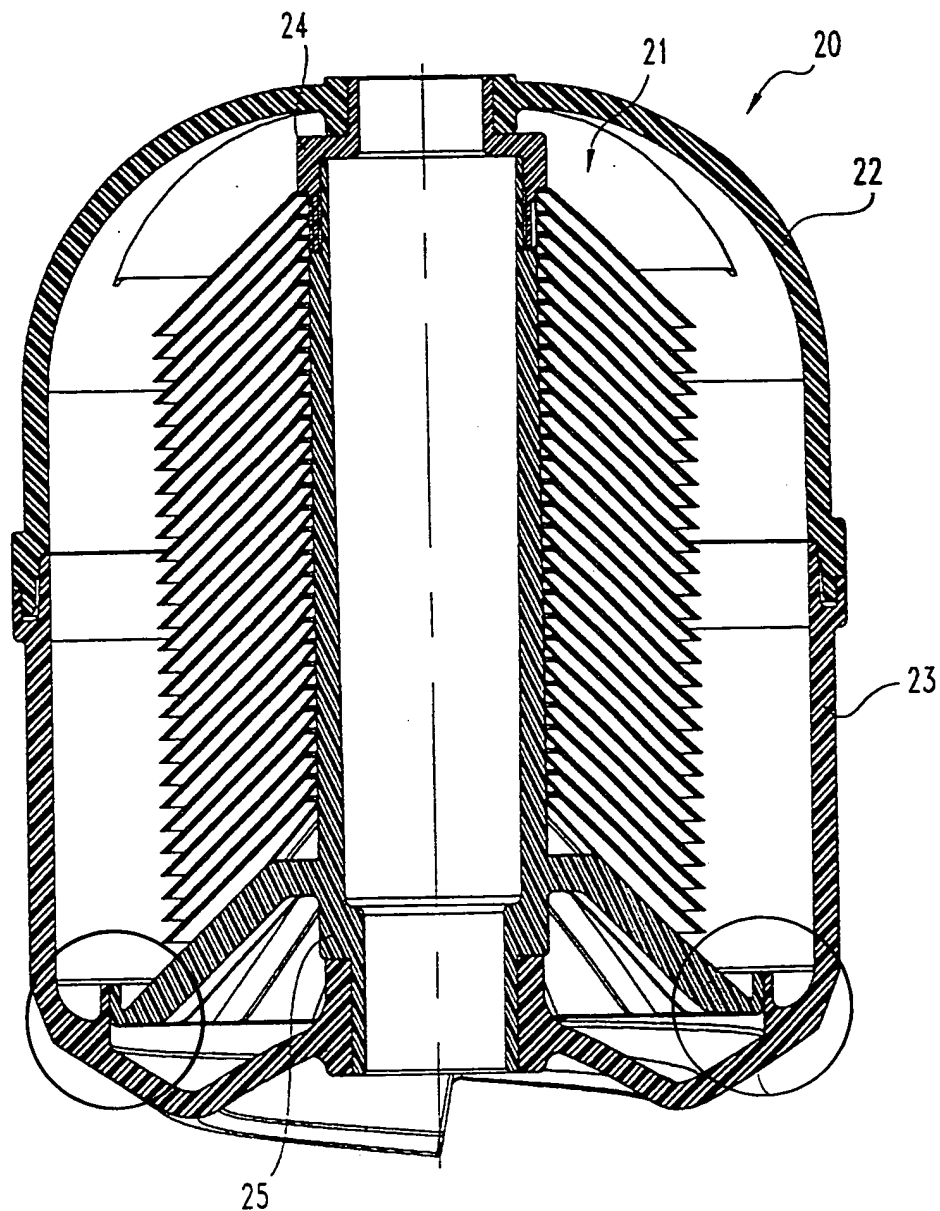
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Resident of Putnam County

My Commission Expires:

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**Fig. 2**

What is claimed is:

1. A fluid separation centrifuge for the separation of particulate matter from a fluid, said separation centrifuge including a rotor housing and a fluid separation device positioned within said rotor housing, wherein the improvement comprises:  
said fluid separation device including a base plate which is designed and arranged with a peripheral lip formed with a generally cylindrical modified portion therein; and  
said rotor housing including a generally cylindrical projection which is designed and arranged to contact said modified portion so as to create a generally cylindrical sealed interface at the location of circumferential contact between said projection and said modified portion.
2. The fluid separation centrifuge of claim 1 wherein said modified portion has a lateral cross sectional shape which is U-shaped.
3. The fluid separation centrifuge of claim 2 wherein said rotor housing is fabricated out of plastic.
4. The fluid separation centrifuge of claim 3 wherein said rotor assembly is designed and arranged as a disposable rotor assembly.
5. The fluid separation centrifuge of claim 4 which further includes a sealing compound placed between said projection and said modified portion.
6. The fluid separation centrifuge of claim 1 wherein said modified portion has the shape of a raised cylindrical wall.

7. The fluid separation centrifuge of claim 6 wherein said projection and said raised cylindrical wall are securely joined together by means of a spin weld.

8. The fluid separation centrifuge of claim 1 wherein said rotor housing is fabricated out of plastic.

9. The fluid separation centrifuge of claim 1 wherein said rotor assembly is designed and arranged as a disposable rotor assembly.

10. The fluid separation centrifuge of claim 1 which further includes a sealing compound placed between said projection and said modified portion.

11. A fluid separation centrifuge for the separation of particulate matter from a fluid, said separation centrifuge including a rotor housing and a fluid separation device positioned within said rotor housing, wherein the improvement comprises:

a support plate comprising one portion of said fluid separation device, said support plate defining an annular receiving channel; and

a raised, substantially cylindrical projection comprising one portion of said rotor housing, said cylindrical projection being received by said receiving channel with an interference fit for establishing a sealed interface between said projection and said receiving channel.

12. The fluid separation centrifuge of claim 11 wherein said receiving channel has a lateral cross sectional shape which is U-shaped.

13. The fluid separation centrifuge of claim 12 wherein said rotor housing is fabricated out of plastic and said projection is in unitary construction with the remainder of said rotor housing.



14. The fluid separation centrifuge of claim 13 wherein said rotor housing is designed and arranged as a disposable component.

15. The fluid separation centrifuge of claim 14 which further includes a sealing compound placed between said projection and said receiving channel.

16. The fluid separation centrifuge of claim 11 wherein said rotor housing is fabricated out of plastic and said projection is in unitary construction with the remainder of said rotor housing.

17. The fluid separation centrifuge of claim 11 wherein said rotor housing is designed and arranged as a disposable component.

18. The fluid separation centrifuge of claim 11 which further includes a sealing compound placed between said projection and said receiving channel.

## AMENDMENTS TO THE CLAIMS

1. (Presently amended) A fluid separation centrifuge for the separation of particulate matter from a fluid, ~~said separation centrifuge including a rotor housing and a fluid separation device positioned within said rotor housing, wherein the improvement comprises~~ comprising:

a rotor housing including a housing wall; and

a base plate for a fluid separation device positioned within said rotor housing, wherein the improvement comprises:

~~said fluid separation device including a base plate which is~~ being designed and arranged with a peripheral lip formed with a generally cylindrical modified portion therein, said modified portion having a lateral cross sectional shape which is U-shaped; and

said rotor housing including a generally cylindrical projection spaced inwardly from said housing wall and which is designed and arranged to contact said modified portion so as to create a generally cylindrical sealed interface at the location of circumferential contact between said projection and said modified portion.

2. (canceled)

3. (presently amended) The fluid separation centrifuge of claim 2 1 wherein said rotor housing is fabricated out of plastic.

4. (original) The fluid separation centrifuge of claim 3 wherein said rotor assembly is designed and arranged as a disposable rotor assembly.

5. (original) The fluid separation centrifuge of claim 4 which further includes a sealing compound placed between said projection and said modified portion.

Claims 6-10 (canceled).

11. (Presently amended) A fluid separation centrifuge for the separation of particulate matter from a fluid, ~~said separation centrifuge including a rotor housing and a fluid separation device positioned within said rotor housing, wherein the improvement comprises~~ comprising:

a rotor housing including a housing wall; and

a support plate comprising one portion of said a fluid separation device positioned within said rotor housing wherein the improvement comprises;

said support plate defining an annular receiving channel having a lateral cross sectional shape which is U-shaped; and

a raised, substantially cylindrical projection comprising one portion of said rotor housing and being spaced inwardly from said housing wall, said cylindrical projection being received by said receiving channel with an interference fit for establishing a sealed interface between said projection and said receiving channel.

12. (canceled).

13. (Presently amended) The fluid separation centrifuge of claim 12 ~~11~~ wherein said rotor housing is fabricated out of plastic and said projection is in unitary construction with the remainder of said rotor housing.

14. (original) The fluid separation centrifuge of claim 13 wherein said rotor housing is designed and arranged as a disposable component.

15. (original) The fluid separation centrifuge of claim 14 which further includes a sealing compound placed between said projection and said receiving channel.

16. (original) The fluid separation centrifuge of claim 11 wherein said rotor housing is fabricated out of plastic and said projection is in unitary construction with the remainder of said rotor housing.

17. (original) The fluid separation centrifuge of claim 11 wherein said rotor housing is designed and arranged as a disposable component.

18. (original) The fluid separation centrifuge of claim 11 which further includes a sealing compound placed between said projection and said receiving channel.

19. (new) A fluid separation centrifuge for the separation of particulate matter from a fluid comprising:

a rotor housing including a housing wall; and

a base plate for a fluid separation device positioned within said rotor housing, wherein the improvement comprises:

said base plate being integral with a centertube and being designed and arranged with a peripheral lip formed with a generally cylindrical wall portion; and

said rotor housing including a generally cylindrical projection spaced inwardly from said housing wall and which is designed and arranged with an inside surface for contacting said wall portion so as to create a generally cylindrical sealed interface at the location of circumferential contact between said projection and said wall portion by a spin weld.

20. (new) A fluid separation centrifuge for the separation of particulate matter from a fluid comprising:

a rotor housing including a housing wall; and

a base plate for a fluid separation device positioned within said rotor housing, wherein the improvement comprises:

said base plate being integral with a centertube and being designed and arranged with a peripheral lip formed with a generally cylindrical wall portion; and

**Claims as Amended - Exhibit B**

Statement by the Inventor/ Affidavit of Ismail C. Bagci

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said rotor housing including a generally cylindrical projection spaced inwardly from said housing wall and which is designed and arranged with an inside surface for contacting said wall portion so as to create a generally cylindrical sealed interface at the location of circumferential contact between said projection and said wall portion by an interference fit.

21. (new) A fluid separation centrifuge for the separation of particulate matter from a fluid comprising:

a rotor housing including a housing wall; and

a base plate for a fluid separation device positioned within said rotor housing, wherein the improvement comprises:

said base plate being integral with a centertube and being designed and arranged with a peripheral lip formed with a generally cylindrical wall portion; and

said rotor housing including a generally cylindrical projection spaced inwardly from said housing wall and which is designed and arranged with an inside surface for contacting said wall portion so as to create a generally cylindrical sealed interface at the location of circumferential contact between said projection and said wall portion by the use of an adhesive.

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**STATEMENT BY THE INVENTOR**  
**AFFIDAVIT OF ISMAIL C. BAGCI**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Ismail C. Bagci, being first duly sworn, do depose and state the following as my Statement for the Correction of Inventorship of the captioned patent application:

1. I have reviewed the claims of the captioned patent application, including the claims as originally filed (Exhibit A to this Affidavit) and the claims as now amended (Exhibit B to this Affidavit).

2. I am jointly responsible for the conception of at least one of the claimed elements, believed to provide patentability, of the claims as set forth in Exhibit A and as set forth in Exhibit B.

3. I was not listed as a named inventor in the captioned patent application and this error (i.e., omission) occurred without deceptive intent.

4. It is my understanding, based upon information and belief, that certain features of the invention disclosed in the captioned patent application were intended to be the focus of the claimed invention. Since I was not one of the inventors for these features, I was not named as an inventor. This decision occurred without any deceptive intent.

5. Based upon information and belief, when the patent attorney that prepared the captioned patent application reviewed all of the invention features and evaluated the patentability of these features, he concluded that one of the embodiments that I jointly

**STATEMENT BY THE INVENTOR**  
**AFFIDAVIT OF ISMAIL C. BAGCI**

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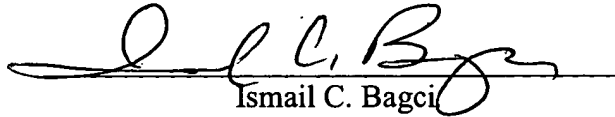
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conceived should be claimed. He assumed that all of the proper inventors were named and no changes were made to inventorship prior to filing.

It was only after the first Office Action in the captioned patent application that the topic of inventorship was reviewed again. I was consulted regarding the pending claims and the cited references. Considering the specific features of the claimed invention and my conception contributions, I agreed that I should be added as a joint inventor.

Upon information and belief, my omission as a named inventor for the captioned patent application was unintentional and occurred without deceptive intent. Nevertheless, in order to depict proper inventorship, my name should be added as one of the named inventors to the captioned patent application.

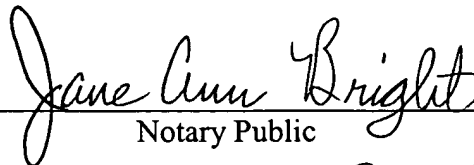
WITNESS my hand this 16 day of February, 2004.

  
Ismail C. Bagci

STATE OF TENNESSEE     )  
                                      ): ss  
COUNTY OF PUTNAM     )

Before me, a Notary Public, in and for said County and State, personally appeared Ismail C. Bagci, who, being first duly sworn upon his oath, acknowledged the execution of the foregoing "STATEMENT BY THE INVENTOR, AFFIDAVIT OF ISMAIL C. BAGCI" as his voluntary act and deed.

WITNESS my hand and Notarial Seal this 16th day of February, 2004.

  
Notary Public

Printed: Jane Ann Bright

Resident of Putnam County

My Commission Expires:

3/21/06